

UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE United States Patent and Trademark Office Address: COMMISSIONER FOR PATENTS P.O. Box 1450 Alexandria, Virginia 22313-1450 www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/973,298	10/09/2001	John W. Polley	963 P 001	5996
7590 10/20/2003		EXAMINER		
DILWORTH & BARRESE, LLP 333 EARLE OVINGTON BOULEVARD			SIMONE, CATHERINE A	
UNION DALE,				PAPER NUMBER
0111011 21122,			1772	
			DATE MAILED: 10/20/2003	

Please find below and/or attached an Office communication concerning this application or proceeding.

· _		6			
	Application No.	Applicant(s)			
	09/973,298	POLLEY, JOHN W.			
Office Action Summary	Examiner	Art Unit			
	Catherine Simone	1772			
The MAILING DATE of this communication appears on the cover sheet with the correspondence address Period for Reply					
A SHORTENED STATUTORY PERIOD FOR REPLY THE MAILING DATE OF THIS COMMUNICATION. - Extensions of time may be available under the provisions of 37 CFR 1.1 after SIX (6) MONTHS from the mailing date of this communication. - If the period for reply specified above is less than thirty (30) days, a replent of the period for reply is specified above, the maximum statutory period of Failure to reply within the set or extended period for reply will, by statute. - Any reply received by the Office later than three months after the mailing earned patent term adjustment. See 37 CFR 1.704(b). Status	36(a). In no event, however, may a reply be ting within the statutory minimum of thirty (30) dawill apply and will expire SIX (6) MONTHS from a cause the application to become ABANDONI	mely filed ys will be considered timely. n the mailing date of this communication. ED (35 U.S.C. § 133).			
1) Responsive to communication(s) filed on <u>03</u> .	July 2003 .				
2a) This action is FINAL . 2b) ⊠ Th	nis action is non-final.				
3) Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under <i>Ex parte Quayle</i> , 1935 C.D. 11, 453 O.G. 213. Disposition of Claims					
4) Claim(s) 1-30 is/are pending in the application.					
4a) Of the above claim(s) is/are withdrawn from consideration.					
5) Claim(s) is/are allowed.					
6)⊠ Claim(s) <u>1-30</u> is/are rejected.					
7) Claim(s) is/are objected to.					
8) Claim(s) are subject to restriction and/o	or election requirement.	•			
9) The specification is objected to by the Examiner.					
10) The drawing(s) filed on is/are: a) □ accepted or b) □ objected to by the Examiner.					
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).					
11) ☐ The proposed drawing correction filed on is: a) ☐ approved b) ☐ disapproved by the Examiner.					
If approved, corrected drawings are required in reply to this Office action.					
12)☐ The oath or declaration is objected to by the Examiner.					
Priority under 35 U.S.C. §§ 119 and 120					
13) Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).					
a) ☐ All b) ☐ Some * c) ☐ None of:					
 Certified copies of the priority documents have been received. 					
2. Certified copies of the priority documents have been received in Application No					
 3. Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)). * See the attached detailed Office action for a list of the certified copies not received. 					
14) Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).					
a) ☐ The translation of the foreign language pro	ovisional application has been re-	ceived.			
Attachment(s)					
1) Notice of References Cited (PTO-892) 2) Notice of Draftsperson's Patent Drawing Review (PTO-948) 3) Information Disclosure Statement(s) (PTO-1449) Paper No(s) _	5) Notice of Informal	y (PTO-413) Paper No(s) Patent Application (PTO-152)			

Art Unit: 1772

DETAILED ACTION

Withdrawn Rejections

- 1. The 35 U.S.C. 112 rejections of claims 1-29 of record in Paper #3, Page 2, Paragraph 2 have been withdrawn due to the Applicant's argument in Paper #5.
- 2. The 35 U.S.C. 102 rejection of claims 1-5 of record in Paper #3, Pages 2-3, Paragraph 4 has been withdrawn due to the Applicant's argument in Paper #5.
- 3. The 35 U.S.C. 103 rejection of claims 6-12 of record in Paper #3, Pages 4-5, Paragraph 7 has been withdrawn due to the Applicant's argument in Paper #5.
- 4. The 35 U.S.C. 103 rejection of claims 13-16 of record in Paper #3, Pages 6-7, Paragraph 8 has been withdrawn due to the Applicant's argument in Paper #5.
- 5. The 35 U.S.C. 103 rejection of claims 17-21 of record in Paper #3, Pages 7-8, Paragraph 9 has been withdrawn due to the Applicant's argument in Paper #5.

Repeated Rejections

- 6. The 35 U.S.C. 102 rejection of claim 29 as anticipated by Kolsky is repeated for the reasons previously of record in Paper #3, Page 3, Paragraph 5.
- 7. The 35 U.S.C. 103 rejection of claims 22-28 over Kolsky in view of Small is repeated for the reasons previously of record in Paper #3, Pages 8-9, Paragraph 10.

Art Unit: 1772

Claim Rejections - 35 USC § 102

8. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless -

- (b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.
- 9. Claims 1-3 and 30 are rejected under 35 U.S.C. 102(b) as being anticipated by Kolsky (5,274,846).

Kolsky discloses a mat for decreasing musculoskeletal fatigue in humans during prolonged static postural stress (see col. 3, lines 19-22) comprising one or more layers of an air bubble shaped closed cellular material (Fig. 1, #24); and one or more layers selected from the group of materials consisting of closed cellular polyethylene foam and closed cellular polypropylene foam materials (Fig. 1, #10 and #14; also see col. 4, lines 31-38). Regarding claim 2, the air bubble shaped closed cellular material is inherently an anti-static air bubble shaped closed cellular material. Regarding claim 3, note at least two layers of the air bubble shaped closed cellular material (Fig. 11, #114 and #116; also see col. 6, lines 35-38) and wherein each of the bubble layers has a flat side and a bubble side.

Furthermore, Kolsky discloses a method for decreasing musculoskeletal fatigue in humans resulting from static postural stress in a surgical theatre during open operative procedures which method also facilitates maintaining the surgical theatre in a surgically safe environment comprising the steps of: positioning a completely disposable mat on the floor of the surgical theatre prior to or during an operative procedure; the mat comprising one or more layers of an air bubble shaped closed cellular material (Fig. 1, #24); and one or more layers selected

Application/Control Number: 09/973,298

Art Unit: 1772

from the group of materials consisting of closed cellular polyethylene foam and closed cellular polypropylene foam materials (Fig. 1, #10 and #14; also see col. 4, lines 30-41); supporting a human on the mat during a period of static postural positioning; disposing of the mat after the conclusion of the operative procedure.

It is to be noted that claim 30 is a recitation of "intended use" and it has been held that a recitation with respect to the manner in which a claimed product is intended to be employed does not differentiate the claimed product from a prior art product satisfying the claimed structural limitations. *Ex parte Masham*, 2 USPQ2d 1647 (1987).

Claim Rejections - 35 USC § 103

- 10. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:
 - (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.
- 11. Claims 4 and 5 are rejected under 35 U.S.C. 103(a) as being unpatentable over Kolsky (5,274,846).

Kolsky discloses a mat for decreasing musculoskeletal fatigue in humans during prolonged static postural stress (see col. 3, lines 19-22) comprising one or more layers of an air bubble shaped closed cellular material (Fig. 1, #24); and one or more layers selected from the group of materials consisting of closed cellular polyethylene foam and closed cellular polypropylene foam materials (Fig. 1, #10 and #14; also see col. 4, lines 31-38). However, Kolsky fails to disclose the bubble side of one of the layers of air bubble shaped closed cellular

Application/Control Number: 09/973,298

Art Unit: 1772

material positioned to face the bubble side of another of the layers of air bubble shaped closed cellular material and, further, Kolsky fails to disclose a layer of the closed cellular polyethylene foam material interposed between the layers of air bubble shaped closed cellular material. It would have been obvious to one of ordinary skill in the art at the time the invention was made to have the bubble side of one of the layers of air bubble shaped closed cellular material positioned to face the bubble side of another of the layers of air bubble shaped closed cellular material in Kolsky and to have provided a layer of the closed cellular polyethylene foam material interposed between the layers of air bubble shaped closed cellular material in Kolsky, since it has been held that rearranging parts of an invention involves only routine skill in the art absence of showing unexpected results. *In re Japikse*, 86 USPQ 70.

12. **Claims 6–12** are rejected under 35 U.S.C. 103(a) as being unpatentable over Kolsky (5,274,846) in view of Small (4,644,592).

Kolsky discloses a mat for decreasing musculoskeletal fatigue in humans during prolonged static postural stress (see col. 3, lines 19-22) comprising one or more layers of an air bubble shaped closed cellular material (Fig. 1, #24); and one or more layers selected from the group of materials consisting of closed cellular polyethylene foam and closed cellular polypropylene foam materials (Fig. 1, #10 and #14; also see col. 4, lines 31-38). However, Kolsky fails to disclose a base layer including a low-tack adhesive bottom surface and a removable liner releasably attached to the lower surface of the low-tack adhesive. Small teaches that it is old and well-known in the art to have a base layer including a low-tack adhesive bottom surface (Fig. 1, #16) and a removable liner (Fig. 1, #18) releasably attached to the lower surface

of the low-tack adhesive (Fig. 1, #16) for the purpose of producing a mat with an upper surface adapted for frictional contact with human body parts.

Therefore, it would have been obvious to one of ordinary skill in the art at the time the applicant's invention was made to have provided the mat in Kolsky with a base layer including a low-tack adhesive bottom surface and a removable liner releasably attached to the lower surface of the low-tack adhesive as suggested by Small in order to produce a floor mat with an upper surface adapted for frictional contact with human body parts.

Regarding **claim 9**, Kolsky teaches a cover layer of anti-static closed cellular polypropylene foam material (Fig. 3, #34 or Fig. 4, #42).Regarding **claim 10**, note in Kolsky the layers comprising the mat are adhered together and the mat includes a laminating adhesive between the layers to adhere the layers together (Fig. 1, #12 and #16).

Regarding **claim 11**, Kolsky discloses bubble layers (Fig. 1, #24) and polyethylene foam layer (Fig. 1, #14) are between the base layer (Fig. 1, #22) and the cover layer (Fig. 1, #10). However, Kolsky fails to disclose the bubble layers and the polyethylene foam layer being dimensioned to provide the mat with a truncated pyramidal shape. Normally, it is expected that a change in shape of the bubble layers and the polyethylene foam layer would be an unpatentable modification. Under some circumstances, however, changes such as shape may impart patentability to a product if the particular shape claimed produces a new and unexpected result which is different in kind and not merely in degree from the results of the prior art. *In re Dailey et al.* 149 USPQ 47 CCPA 1966.

Therefore, it would have been obvious to one of ordinary skill in the art at the time the applicant's invention was made to change the shape of the bubble layers and the polyethylene

Art Unit: 1772

foam layer noted in Kolsky to provide the mat with a truncated pyramidal shape. One skilled in the art would have been motivated to do so in order to form a floor mat, since it has been held that the change in form or shape of the bubble layers and the polyethylene foam layer would be an unpatentable modification absence of showing unexpected results.

Regarding **claim 12**, Kolsky discloses the claimed invention except for the bubble shaped material having less than a 10% thickness loss based on a 0.5 pounds per square inch loading over 15 days utilizing a static test method of 10" x 10" material samples, the closed cellular polyethylene foam material having a density of at least about 1.7 pounds per cubic foot and the polypropylene closed foam material having a density of at least about 0.5 pounds per cubic feet. It would have been obvious to one of ordinary skill in the art at the time the invention was made to have the bubble shaped material having less than a 10% thickness loss based on a 0.5 pounds per square inch loading over 15 days utilizing a static test method of 10" x 10" material samples, the closed cellular polyethylene foam material having a density of at least about 1.7 pounds per cubic foot and the polypropylene closed foam material having a density of at least about 0.5 pounds per cubic feet in Kolsky, since it has been held that mere recognition of latent properties in the prior art does not render nonobvious an otherwise known invention. *In re Wiseman*, 596 F.2d 1019, 201 USPQ 658 (CCPA 1979).

13. Claims 13-16 are rejected under 35 U.S.C. 103(a) as being unpatentable over Kolsky (5,274,846).

Kolsky discloses a mat comprising a first layer and a third layer each composed of an anti-static air bubble shaped closed cellular material having a flat side and a bubble side (Figs. 1, #24; also see col. 6, lines 35-38), a second layer composed of an anti-static closed cellular

Art Unit: 1772

polyethylene foam material (Fig. 1, #10; also see col. 4, lines 31-38) and a fourth layer composed of an anti-static polypropylene closed cellular material (Fig. 1, #14; also see col. 4, lines 34-38). However, Kolsky fails to disclose the specific arrangement of layers as presently claimed in claim 13, i.e. the second layer over the first layer, the third layer over the second layer and the fourth layer over the third layer. It would have been obvious to one of ordinary skill in the art at the time the applicant's invention was made to have the layers in Kolsky be in the specific arrangement as recited in claim 13 i.e. the second layer over the first layer, the third layer over the second layer and the fourth layer over the third layer, since it has been held that rearranging parts of an invention involves only routine skill in the art absence of showing unexpected results. *In re Japikse*, 86 USPQ 70.

14. Claims 17-21 are rejected under 35 U.S.C. 103(a) as being unpatentable over Kolsky (5,274,846) in view of Small (4,644,592).

Regarding **claims 17-19**, Kolsky discloses the claimed invention except for a low-tack adhesive layer comprising an upper polyethylene carrier sheet, a low tack adhesive carried on the bottom side of the carrier sheet and a removable liner releasably attached to the adhesive. Small teaches it is old and well-known in the art to have a low-tack adhesive layer comprising an upper polyethylene carrier sheet (Fig. 1, #12), a low tack adhesive (Fig. 1, #16) carried on the bottom side of the carrier sheet and a removable liner (Fig. 1, #18) releasably attached to the adhesive for the purpose of producing a disposable mat with an upper surface adapted for frictional contact with human body parts.

Therefore, it would have been obvious to one of ordinary skill in the art at the time the applicant's invention was made to have provided Kolsky with a low-tack adhesive layer

comprising an upper polyethylene carrier sheet, a low tack adhesive carried on the bottom side of the carrier sheet and a removable liner releasably attached to the adhesive in order to produce a disposable mat with an upper surface adapted for frictional contact with human body parts.

Regarding **claims 20** and **21**, Kolsky fails to disclose the specific shape and specific dimensions of each of the layers as recited in claims 20 and 21. Normally, it is expected that a change in shape of the layers would be an unpatentable modification. Under some circumstances, however, changes such as shape may impart patentability to a product if the particular shape claimed produces a new and unexpected result which is different in kind and not merely in degree from the results of the prior art. *In re Dailey et al.* 149 USPQ 47 CCPA 1966.

Therefore, it would have been obvious to one of ordinary skill in the art at the time the applicant's invention was made to change the shape of the layers noted in Kolsky to be of the specific shape and dimensions as recited in claims 20 and 21. One skilled in the art would have been motivated to do so in order to form a floor mat, since it has been held that the change in form or shape of the layers would be an unpatentable modification absence of showing unexpected results.

Response to Arguments

15. Applicant's arguments with respect to claims 1-21 have been considered but are moot in view of the new ground(s) of rejection.

Applicant's arguments filed July 3, 2003 have been fully considered but they are not persuasive.

Regarding claim 29, Applicant states that "Kolsky discloses a cushion, pad, or mat for use as knee pads and shin guards, exercise mats, beach pads, stadium seat cushions, wheelchair

Art Unit: 1772

cushions, bathtub liners, or in luggage handles and pads for shoulder straps. Also, the multilayer cushion material may be used as a liner material for gloves, for example, as padding in a baseball glove or along the fingers of a glove. At no point is there any disclosure or suggestion in Kolsky of the specifically recited steps in the claimed method for decreasing musculoskeletal fatigue in humans resulting from static postural stress in a surgical theatre during open operative procedures." In response to applicant's argument that there is "no disclosure or suggestion in Kolsky of the specifically recited steps in the claimed method for decreasing musculoskeletal fatigue in humans resulting from static postural stress in a surgical theatre during open operative procedures", it has been held that a recitation of the intended use of the claimed invention must result in a structural difference between the claimed invention and the prior art in order to patentably distinguish the claimed invention from the prior art. If the prior art structure is capable of performing the intended use, then it meets the claim. In a claim drawn to a process of making, the intended use must result in a manipulative difference as compared to the prior art. See In re Casey, 152 USPQ 235 (CCPA 1967) and In re Otto, 136 USPQ 458, 459 (CCPA 1963).

Regarding claims 22-28, Applicant states that "At no point is there any disclosure or suggestion in Kolsky of a first layer including an anti-static closed cellular polypropylene foam material, a second layer under said first layer including an anti-static closed cellular polyethylene foam material and a third layer under said second layer including a low tack adhesive material to form a disposable surgical mat. Instead, Kolsky discloses a cushion, pad or mat for use as knee pads and shin guards, exercise mats, beach pads, stadium seat cushions, wheelchair cushions, bathtub liners, or in luggage handles and pads for shoulder straps. Also, the multilayer cushion

Application/Control Number: 09/973,298

Art Unit: 1772

material may be used as a liner material for gloves, for example, as padding in a baseball glove or along the fingers of a glove. Accordingly, nothing in Kolsky would lead one skilled in the art to modify the cushions or pads disclosed therein to add a low tack adhesive layer to the cushion or pad of Kolsky and arrive at the presently claimed disposable surgical mat." In response to Applicant's arguments, the recitation "disposable surgical mat" has not been given patentable weight because it has been held that a preamble is denied the effect of a limitation where the claim is drawn to a structure and the portion of the claim following the preamble is a self-contained description of the structure not depending for completeness upon the introductory clause. *Kropa v. Robie*, 88 USPQ 478 (CCPA 1951).

Furthermore, Applicant states that "Small does not cure and is not cited as curing the deficiencies of Kolsky. Rather, Small is merely cited for its discloses of a removable liner releasably attached to the lower surface of the low-tack adhesive so that upon removal of the liner of the floor mat can be secured to a surface during extended exposure to a water-filled environment." In response to applicant's argument that there is no suggestion to combine the references, the examiner recognizes that obviousness can only be established by combining or modifying the teachings of the prior art to produce the claimed invention where there is some teaching, suggestion, or motivation to do so found either in the references themselves or in the knowledge generally available to one of ordinary skill in the art. See *In re Fine*, 837 F.2d 1071, 5 USPQ2d 1596 (Fed. Cir. 1988)and *In re Jones*, 958 F.2d 347, 21 USPQ2d 1941 (Fed. Cir. 1992). In this case, Kolsky discloses a mat comprising a first layer including an anti-static closed cellular polypropylene foam material (Fig. 1, #10; also see col. 4, lines 30-38) and a second layer including an anti-static closed cellular polypthylene foam material (Fig. 1, #14; also

Art Unit: 1772

see col. 4, lines 30-38). However, Kolsky fails to disclose a layer including a low tack adhesive. Small teaches it is old and well-known in the art to have a low-tack adhesive layer (Fig. 1, #16) for the purpose of producing a mat with an upper surface adapted for frictional contact with human body parts.

Therefore, it would have been obvious to one of ordinary skill in the art at the time the applicant's invention was made to have provided a low-tack adhesive layer in Kolsky as suggested by Small in order to produce a mat with an upper surface adapted for frictional contact with human body parts.

Conclusion

16. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Catherine Simone whose telephone number is (703)605-4297. The examiner can normally be reached on 9:30-6:00.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Harold Pyon can be reached on (703) 308-4251. The fax phone number for the organization where this application or proceeding is assigned is (703) 872-9306.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is (703) 308-0661.

Catherine Simone Examiner Art Unit 1772

October 16, 2003

HAROLD PYON SUPERVISORY PATENT EXAMINER

10/11/03

Page 12